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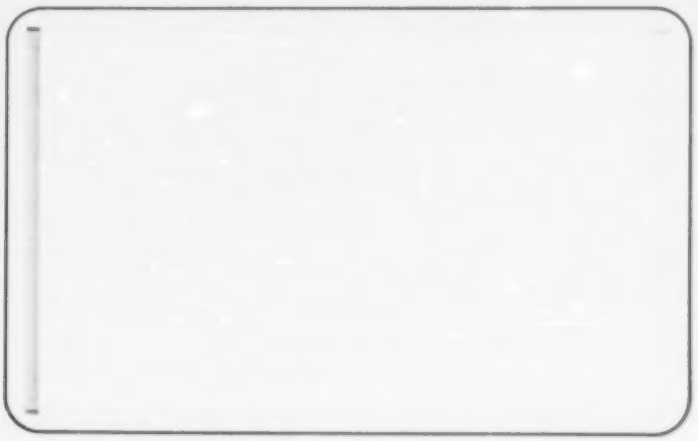

# MANITOBA'S PRIORITY PROJECT PROPOSALS

# FOR THE FEDERAL

# WESTERN DIVERSIFICATION FUND

NOVEMBER, 1987

## BACKGROUND

## WESTERN PREMIERS' PROPOSALS

At the May, 1986 Western Premiers' Conference in Swan River, Manitoba, the Premiers of Manitoba, Saskatchewan, Alberta and British Columbia joined in issuing a formal statement on Western Development, Diversification and Employment. The text of the Western Premiers' Swan River statement included the following major points:

> "Western Premiers agreed that current difficulties in resource and commodity markets should not detract from Western Canadians' positive vision for their future prosperity, employment and development potential.
>
> Although agriculture and natural resources will always be the foundations of the western economy, there is a common need to broaden the base beyond this great resource strength in order to create economic opportunities and jobs.
>
> The Premiers stressed that the key to more stable growth over the long term is diversification -- and that diversification is the main focus of their governments' current development efforts. They agreed as well that diversification of the economic base of Western Canada must also be a high priority for the Government of Canada.
>
> Western Premiers agree that concerted, cooperative action by all governments and the private sector will be required to ensure that these opportunities and jobs are realized."

A year later, at the May, 1987 Western Premiers' Conference in Humboldt, Saskatchewan, the Premiers issued a second joint statement on Western Diversification urging that "An early announcement be made detailing the federal strategy for economic diversification in western Canada." The statement continued:

> "The Premiers expressed concern over federal practices which direct most industrial expansion and development assistance to central and eastern Canada and reiterated their desire for more equitable federal participation in western diversification, with particular attention to each province's economic circumstances, strengths and potential."

The statement also outlined several key priority areas for diversification, including:

- research and development
- new resource development

- increased value added
- secondary manufacturing
- transportation industries, and
- service industries.

## CANADA-MANITOBA CONSULTATIONS TO DATE

A few weeks before the Humboldt meeting, at a bilateral meeting in Winnipeg, the Prime Minister of Canada and the Premier of Manitoba agreed to establish a special Ministerial Coordinating Committee, co-chaired by the Minister of National Health and Welfare for Canada and the Minister of Industry, Trade and Technology for Manitoba, to consult on matters of major concern to the two governments. The first major task agreed upon for that committee was to review economic diversification priorities for Manitoba. Potential federal-provincial agreements on health industries and community water services were identified as an immediate focus for negotiation. Considerable progress has been made in those areas since May and new joint initiatives are expected to be agreed upon in the near future.

A second bilateral meeting between the Prime Minister of Canada and the Premier of Manitoba took place in Winnipeg on August 3 and the next day, the Premiers of Manitoba, Saskatchewan and Alberta joined with the Prime Minister in Edmonton for the announcement of the federal government's new Western Diversification Initiative.

In announcing the federal government's plan to establish a $1.2 billion western development fund, the Prime Minister stated:

> "Diversifying the western economy is an old dream, but never has it been more urgent. Now, for the first time, the tools are in place to do the job. ...And now, through the Western Diversification Office, Western Canadians have an instrument and resources to weave all the strands together in a way that makes most sense in the west."

The same statement continued:

> "The federal government recognizes the importance placed on economic diversification by the western provincial governments and the value of ensuring that federal and provincial initiatives proceed in a coordinated and complementary fashion."

## MANITOBA'S PRIORITY PROJECT PROPOSALS

This summary of Manitoba's priority project proposals for the federal Western Diversification Fund is being submitted in the interests of optimum coordination and cooperation between the federal and provincial governments. This summary supplements and expands on previously-submitted suggestions put forward in meetings between the Prime Minister and the Premier and in meetings of the Canada-Manitoba Ministerial Coordinating Committee.

It is understood that the other three western provinces have also put forward a series of priority project proposals to the federal government, in varying degrees of detail, and that such submissions are continuing.

In Manitoba's case, the priority project proposals are grouped within five main categories:

1. building on the strength of Manitoba's manufacturing sector

2. support for knowledge-based industries and services

3. support for resource-based industries including the agricultural sector and rural development

4. infrastructure support

5. human resource development and women's economic equality.

These major categories are consistent with those identified in earlier Western Premiers' joint statements and are seen as offering a balanced set of options for medium and long term economic development and job creation in Manitoba.

The project proposals are numerous and substantial. Some $3 billion worth of potential projects have been identified -- some 10 times larger than the approximately $300 million share, over five years, which the Minister of National Health and Welfare has indicated Manitoba could reasonably expect to receive as its share of the total federal Western Diversification Fund commitment. The Manitoba Government did not down-size the listing of project priorities to fit the approximately-$300 million constraint, however, for a number of reasons, including an obvious wish to ensure that the federal government was offered a broad range of options for review and assessment:

- The massive scale of some of the projects reflects both the great potential of the province's economy, and some of Manitoba's unmet needs with respect to both public and private investment.

- As others have pointed out, a $300 million infusion of new federal support over five years, (or about $50 - $60 million a year,) while welcome, is relatively small in terms of the overall size of the provincial economy. Manitoba now has a "$20 billion-a-year" economy -- that is, an economy with a gross output value which is expected to exceed $20 billion on an annual basis for 1987. Thus, the WDF allocation represents between 1/5 and 1/4 of 1% of Manitoba GPP. Put another way, the amount is roughly equivalent to the output of the Manitoba economy for a single day.

Notwithstanding these observations, the federal thrust can be of particular benefit if it opens up new opportunities and leverages additional investment from other sources. As well, as the Prime Minister and others have emphasized, the Western Diversification Fund is not the only element of the federal government's western diversification strategy. Another key objective is to diversify existing federal programming and decision-making to ensure that the west receive a fair share of existing federal activity.

It was on this specific issue -- the issue of a fair regional sharing of existing federal expenditures -- that the Manitoba government took issue a year ago with the federal decision to award the CF-18 maintenance contract to Montreal instead of Winnipeg. At the time, the Manitoba government pointed out that the CF-18 decision ran directly counter to the federal government's commitment to encouraging economic western diversification. The province raised similar concerns with respect to the apparently-substantial federal government involvement in preparing and following up a major report on the economic future of the Montreal region. The province is also well aware of the substantial recent shift of industrial development support into central Canada as discussed at recent meetings of First Ministers on the Economy. A welcomed recent departure from that trend was the announcement of the federal government's decision to locate the new Viral Control Laboratory in Winnipeg. As this decision involved an existing federal function for which funds were already budgeted, it is understood the decision to locate the virology lab in Winnipeg will not be counted against Manitoba's share of the basic $1.2 billion fund.

## PRIVATE SECTOR ACCESS TO FEDERAL SUPPORT

Several of the project proposals in the summary which follows would involve the private sector. In fact, in certain cases, specific firms are already involved in project development and in some cases may be pursuing western diversification support on their own initiative through separate channels. The province would not want its project priorities to "squeeze out" legitimate private sector proposals. In fact, however, most of the province's project priorities involve the private sector either directly or indirectly in any case. In some cases, the provincial priorities relate to specific private sector development opportunities involving specific firms. In certain cases, these firms will themselves be putting forward detailed proposals to the Western Diversification Office and the provincial government will be cooperating in providing supporting documentation as required. This is consistent with the earlier-noted Western Premiers' joint statement that "concerted, cooperative action by all governments and the private sector will be required to ensure that these opportunities and jobs are realized."

## ADDITIONAL COMMENTS AND QUALIFICATIONS

In submitting these priority proposals, the Manitoba Government wishes to register some qualifying comments on the federal government's western initiative and on the overall status of federal regional development programming and related activity.

1. While supporting the Western Diversification Fund initiative in principle, the Manitoba Government has emphasized repeatedly that its ultimate judgement of the effectiveness of the Fund must await some experience with the Fund's actual operation. To date, the WDF and the WDO apparently remain in a "start-up" mode.

2. While endorsing the WDF in principle, the province continues to have major reservations about other aspects of federal fiscal and economic policies, many of which were described in the federal document "A Framework for Diversification in Western Canada" which was released on August 4. The province believes that that document overlooked key Manitoba strengths and opportunities and reached questionable conclusions with respect to the effectiveness of a number of current and proposed federal policies. The Manitoba Government has emphasized, for example, that the value of the Western Diversification Initiative itself may be seriously diminished if the federal government does not reach a positive decision on the other major priority identified by the Western Premiers at their 1987 conference in Humboldt, Saskatchewan -- that is, the need for a major deficiency payment for Canadian farmers for the current year.

   Action must also proceed on substantive measures to increase the share of federal purchases in each of the western provinces.

3. It is understood that the $1.2 billion federal western diversification fund is "new" money -- that is, funding that is in addition to "normal" levels, or support that had been committed prior to the announcement of the WDF. For this reason, the province has made the assumption, for purposes of this summary document, that the renewals of existing sub-agreements under the Canada-Manitoba Economic and Regional Development Agreement ("ERDA") will not be financed from the Western Diversification Fund and that overall ERDA cashflows will be maintained on an ongoing basis at levels reasonably comparable to current levels.

   It has also been assumed for purposes of this summary that the federal government will come forward in the relatively near future with proposals for major new Northern and Native Economic Development thrusts. The Manitoba Government would welcome such initiatives and believes they are essential as complements to the Western Diversification Fund and other federal initiatives. In this document, Manitoba government proposals which could reasonably be expected to be considered for support under new federal Northern and Native Economic Development initiatives have been indicated with an asterisk (*).

4. The federal government's Western Diversification Initiative is but one aspect of federal policy affecting regional development. Manitoba remains concerned that the federal government not lose sight of the national regional development policy principles which were agreed upon unanimously by all senior governments in Canada in 1985. Those principles included the statement that "All major national policies should be judged, in part, in terms of their regional impact. And, so

far as is possible those policies should reinforce the goal of fair and balanced regional development." The Manitoba Government is particularly concerned that the new Department of Industry, Science and Technology have a national mandate which complements the mandate of the Western Diversification Office and that "DIST" not serve simply as the economic development department for central Canada.

5. Finally, in the interests of public accountability and an ongoing assessment of the Western Diversification Fund's effectiveness, the Manitoba Government urges the Government of Canada to offer quarterly public reports on fund activities by province, including commitments to date, actual expenditures made, and related economic impact statistics where available.

## SUMMARY LISTING OF PROPOSALS


| | | PAGE |
|---|---|---|
| A. | **Building on the Strength of Manitoba's Manufacturing Sector** | 1 |
| | Assistance to Manitoba's Aerospace Industry - Establishment of a Propulsion Systems Centre | 1 |
| | Canadian Institute for Industrial Technology (CIIT) | 1 |
| | Railroad Locomotive Overhaul Centre | 1 |
| | Particle Board Production | 2 |
| | Program for Advanced Manufacturing Capability | 2 |
| | Transportation Training Centre and Vehicle Testing Centre | 2 |
| B. | **Support for Knowledge-Based Industries and Services** | 3 |
| | Canada-Manitoba Health Industry Development Subsidiary Agreement | 3 |
| | Railway Electrification | 3 |
| | GIS Service Industry | 4 |
| | Canadian Centre for Telemonitoring | 5 |
| | Knowledge Technologies Industry Transfer | 5 |
| | Development of a Computerized Supplier Access and Electronic Tendering System | 5 |
| | Mineral Exploration Research Centre | 6 |
| | Advanced Education Training Technology Systems | 6 |
| | Consortium for Industrial Development | 6 |
| | Construction of a Teleport | 7 |
| | Canada-Manitoba Science and Technology Agreement | 7 |
| | Industrial Development Agreement | 7 |

| | | PAGE |
|---|---|---|
| C. | Support for Resource-Based Industries including Rural Development and the Agriculture Sector | 9 |
| | Energy Intensive Industrial Development Program | 9 |
| | Copper/Zinc Modernization at Flin Flon | 9 |
| | Chromium Mining and Stainless Steel Manufacturing at Bird River Sill, Manitoba | 10 |
| * | Sustainable Base Metal Supply Projects, Northwestern Manitoba | 10 |
| | Diversification of the Bernic Lake Mine Production | 10 |
| | The Application of Tertiary Enhanced Oil Recovery Technology in Manitoba's Oil Fields | 11 |
| | Canada-Manitoba Subsidiary Agreement on Municipal Water and Waste Disposal Infrastructure | 11 |
| | Agricultural Biotechnology and Training Consortium | 11 |
| | River Renewal | 12 |
| | Rural Industrial Project | 13 |
| | Conservation Stewardship Initiative | 13 |
| | Downtown Revitalization Program | 14 |
| | Rural Investment Funds | 15 |
| | Upgrading Rural Telephone Services (Universal Individual Line Service, UILS) | 15 |
| * | Atikaki "World Class" Wilderness | 15 |
| D. | Infrastructure Support | 16 |
| | Winnipeg Convention Centre Technological Enhancement | 16 |
| * | All Weather Road for Communities on the East Side of Lake Winnipeg | 16 |
| | Location of the Western Headquarters of the National Transportation Agency in Winnipeg | 17 |
| | "The Forks" Development Initiative | 17 |
| | Urban Infrastructure Upgrading, City of Winnipeg | 18 |

PAGE

Shoal Lake: Securing Winnipeg's Water Supply 18

Rapid Transit Corridor, City of Winnipeg 18

Upgrading Post-Secondary Education Facilities 19

Provincial Highways Upgrading 20

Increased Highway Load Limits in Manfor Haul Areas 21

Western Canada Grain Handling and Storage Industry Marketing and Training Centre, Winnipeg 21

* Conawapa Generation Station and Transmission Facility 22

E. Human Resource Development and Women's Economic Equality 24

Skill Training Initiative 24

Women's Economic Development Corporation 24

Employment Cooperative Initiative 25

* Promotion and Development of Utility Cooperatives in Rural and Northern Manitoba 25

* Urban Native Renewal Effort 26

Service Sector Initiative 26

* Educational Development Initiative 27

Appendix A - ERDA RENEWALS 28

Renewal of Canada-Manitoba Subsidiary Agreement on Churchill 28

Canada-Manitoba Subsidiary Agreement on Transportation Development 29

Canada-Manitoba Forest Resources Development Agreement 29

Expansion and Extension of Canada-Manitoba Tourism Agreement 30

Renewal of Canada-Manitoba Mineral Development Agreement 30

Communications and Cultural Enterprises Agreement 31

Agri-Food Agreement Extension 31

Appendix B - Energy Intensive Industrial Development Program

## A. BUILDING ON THE STRENGTH OF MANITOBA'S MANUFACTURING SECTOR

### Assistance to Manitoba's Aerospace Industry - Establishment of a Propulsion Systems Centre

Today's rapidly advancing aerospace and related high technology fields increasingly require joint venture consortia to undertake the extensive development and associated research effort required. Manitoba's aerospace industry could be strengthened and diversified through the sharing of major ventures with high technology, U.S. and European companies in capturing the increasing number of opportunities that will become available over the course of the next two decades. Specifically, the industry would require additional financial collaboration in the range of $100 million to enable Manitoba's aerospace industry to establish a world class center for complete propulsion systems design, development and manufacture. Such a joint venture would virtually make Manitoba a world leader in this rapidly advancing field of technology and serve as a springboard for future joint ventures. Building on Manitoba's current expertise and international reputation in the field of propulsion system manufacturing and overhaul, it is envisioned that this venture could eventually produce either all or major portions of complete propulsion systems designed, developed and manufactured within Manitoba. The technology would not be restricted to aerospace, but would include terrestrial transportation and industrial applications which utilize aero-derived engines such as marine, locomotive, energy conversion and power generation.

### Canadian Institute for Industrial Technology (CIIT)

The CIIT is a specialized R & D facility that has an optimized capability for the development of advanced industrial technologies (robotics, expert systems, vision systems). Although fully completed for over a year, the facility is currently under-utilized. With a renewed commitment the CIIT could provide significant economic benefits for Manitoba and the Western Region. The CIIT requires the National Research Council to fulfill staffing and financial commitments for the ongoing operation of the facility. Some $20 million over the next five years is required.

### Railroad Locomotive Overhaul Centre

A railroad locomotive overhaul centre, financed through the Western Diversification Initiative, would consolidate and expand Manitoba's position as a major centre for rolling stock manufacture, repair and maintenance. With the presence of both the large CN and CP maintenance shops, the large number of local firms supplying railroad equipment, and the significant infrastructure of skilled labour and industrial support, Winnipeg is ideally suited to become a North American state of the art facility with considerable import replacement and export potential. In addition, private sector companies are actively pursuing the idea of a joint venture to maintain and overhaul locomotive engines in Winnipeg.

Particle Board Production

The construction of a $16 million particle board plant would stabilize the supply and quality of an essential raw material in high demand by Manitoba's nationally significant and expanding furniture manufacturing industry. Eliminating the current problem of unstable particle board supply would ensure the continuing competitiveness of Manitoba's furniture manufacturing industry, provide continued employment growth opportunities, and double exports.

Program for Advanced Manufacturing Capability

In the event that the current bilateral and multilateral trade negotiations might lead to a more liberalized trade environment, Manitoba would then be challenged to improve its industrial competitiveness in order to expand exports and create jobs. The pace at which Manitoba industry adopts advanced manufacturing capabilities is cited as an inhibiting factor in the industry's competitiveness. A $4 million government program targeted to manufacturers with excellent export potential would reduce the risks associated with the installation of advance manufacturing capability by cost-sharing feasibility studies and by providing limited financing.

This initiative could also be included in an Industrial Development Agreement.

Transportation Training Centre and Vehicle Testing Centre

Rapidly changing technology and increasing international competition present Manitoba with the challenge to enhance its position as a major transportation centre. There are few commercially operated facilities in North America offering a complete range of transportation technology testing and design analysis. There is considerable private sector interest in assessing the feasibility of establishing a major transportation training centre and multimodal transportation testing centre in Manitoba, possibly at Gimli (where facilities currently exist for various transportation modes). The training centre would provide a centrally located facility for the training of manpower to handle both existing and new technology. The testing centre would provide testing and designing services to the multimodal manufacturing industry on a national and international basis. Rigorous climatic conditions at Gimli would allow testing needed for foreign automobiles to hovercrafts to meet the local standards required for sale in North America. In addition, the testing centre would assist local transportation manufacturers in improving their designs in order that they may maintain existing markets and capture new markets.

Up to $130,000 is required for the feasibility studies of both centres. If feasible, development could be undertaken with an initial allocation of some $10 million.

## B. SUPPORT FOR KNOWLEDGE BASED INDUSTRIES AND SERVICES

### Canada-Manitoba Health Industry Development Subsidiary Agreement

Manitoba's health industry sector offers considerable potential for economic diversification, development and renewal. Accordingly, a Canada-Manitoba Subsidiary Agreement on Health Industry Development is identified as a significant potential initiative for the Western Diversification Initiative.

The objectives of the Agreement would be to:

- support the development of viable employment opportunities in the health industry sector of the provincial economy;
- create new efficiencies in the development and usage of existing provincial health-related institutions;
- encourage the application and use of new technological developments as a means to improved productivity, competitiveness, economic development and growth with an initial focus on products for the aging and rehabilitation marketplace;
- further long-term job creation and employment preservation while encouraging an equitable distribution of the risks and rewards of technological change and a sensitivity to the human aspects of technological change;
- promote access to domestic as well as new foreign markets; and
- foster the realization of strategic health industry projects capable over the medium-term of diversifying the industrial base in Manitoba.

### Railway Electrification

A Framework for Diversification in Western Canada recognizes the transportation sector as a growing exporter of equipment, technology and service. Rail electrification is identified as an area having significant potential. Electrification has received gradual acceptance as the substitute for fossil fuels as a source of motive power, and has been adopted to specific types of rail operations primarily outside of North America. Electrification will be extended eventually to similar operations in North America. A prototype operation is an integral part of that extension. The location of that prototype operation will have the potential to become a centre for research into the new technology and expertise in its application as well as a source of manufactured electrical and signaling components.

The Canadian Pacific mainline from Brandon to the Manitoba/Ontario border is an ideal site for the prototype electrification of western Canada's railway mainlines. It was identified as such in earlier investigations of railway electrification for the following reasons:

1. the large traffic volume makes electrification worthwhile;

2. the terrain is accessible to work crews;

3. the terrain is varied providing engineers with different, but not insurmountable problems to solve; and

4. the line is double tracked, permitting continuous service while construction proceeds.

The cost of electrifying the Brandon-Manitoba/Ontario border line is estimated at $200 million.

Locating the prototype Canadian operation in Manitoba would give Manitoba the opportunity to become the exporter of advanced electronic material and construction expertise, and the North American centre of electrification research. Extension of electrification to other sections of mainline track in Canada, the United States and to rail lines having similar operations, terrain, etc., elsewhere in the world will create export opportunities. Manitoba electrical component manufacturers, construction companies, engineers, and Manitoba Hydro will benefit significantly from the immediate undertaking. The prototype will highlight the utilization of Manitoba's abundant hydro-electrical resources as a means to conserve fossil fuels.

GIS Service Industry

Various forms of geographic based information systems (GIS) are used by federal, provincial and municipal governments, private and public utilities, and many private firms to support resource development decisions. Within the Manitoba government, many manual systems exists, sometimes resulting in inefficiencies, duplication, misinformation, and out-of-date information. The development and utilization of an automated coordinated information and evaluation system would have value and presents Manitoba with an opportunity of developing a GIS service industry. It is estimated some $25 to $50 billion will be spent in the next twelve to fifteen years in North America alone in development, training, software and hardware purchases and data conversion in the area of geographic facilities information systems. Widespread interest currently exists among the various levels of government, their agencies and the private sector. With a $10 million investment from the Western Diversification Initiative, a Manitoba industry could evolve to provide the services required to develop and service a coordinated system which meets the GIS requirements of government and industry. Given the nature and extent of the proposed GIS undertaking, particular attention will be required regarding ongoing protection of the public interest.

Canadian Centre for Telemonitoring

The federal Department of Communications and the Province of Manitoba agree to work together towards establishing the Canadian Centre for Telemonitoring. The mission of the Centre would be:

> "To promote applied research and development of telemonitoring systems through the application of informatics and communications technologies, in cooperation with industry, universities and government, leading to the development, manufacture, marketing and support of products and services which will enhance productivity, economic development and social benefits in Canada."

The Government of Manitoba strongly supports the location of the centre in Winnipeg and the subsequent working links that will be established with all of the other relevant industrial and academic institutions across the country.

The establishment of the Canadian Centre for Telemonitoring will attract resources from the DOC "A" budget. Approximately 30 scientists from government, universities and industry will be employed with a budget in excess of $5 million per year. These investments will permit the development and marketing of new products in Canada and abroad.

Knowledge Technologies Industry Transfer

Opportunities exist for Manitoba to become a major centre of expertise in the application of Knowledge-Based Systems (KBS), a field of artificial intelligence which puts knowledge into an electronic format. Manitoba's KBS industry currently operates at a national level, with technology applications in the health and education field. Funding from the Western Diversification Initiative would allow the industry to expand into additional sectors such as manufacturing, telephone network control, hydro reservoir modeling, finance, insurance, commodities management, social services and so on. Private sector firms are keenly interested in joint ventures to further their production.

This initiative might also be appropriate for inclusion in an industrial development agreement.

Development of a Computerized supplier Access and Electronic Tendering System

The federal government's document, A Framework for Diversification in Western Canada, indicates its agreement with

> "... the Premiers' suggestion that federal procurement can be a powerful tool of regional development in western Canada. To that end, the federal government has improved the regional basis in its own procurement and will be introducing new measures to ensure that suppliers in all parts of Canada have equal opportunities to bid."

Enhanced bidding opportunities could be realized through the development of a computerized supplier access and electronic tendering system. Manitoba therefore proposes that the federal government contribute $250,000 to each province for the purpose of launching a cooperative venture of this nature.

Mineral Exploration Research Centre

The province's future mineral exploration programs are seriously hampered by the university community's inability to undertake research activities relating to mineral deposit studies. To overcome this critical problem, it is proposed that a centre of excellence in applied research in the fields of mineral exploration and mineral deposit geology be established at the University of Manitoba. A chair of economic geology would be the nucleous of the centre. Costing some $2 million, the centre would assist the provinces of Manitoba and Saskatchewan and the Northwest Territories in conducting mineral exploration activities into the next century.

Advanced Educational Training Technology Systems

With the establishment of InfoTech and its component the Educational Technology Program, an educational courseware and training systems industry segment is emerging in Manitoba. Computer-based training coupled with CD-ROM and video disc technologies are expected to be a major growth industry over the next five to ten years. Thus, building on the support provided by InfoTech, it is proposed that an advanced technology incubation/development space and development support fund be created. This would provide educational and training courseware companies with access to advanced technology and enable them to research and develop leading edge applications for both industrial and institutional use. Major elements of advanced educational/training and delivery systems include Knowledge-Based Systems (KBS) and graphic systems. Manitoba has a base of companies that can provide these elements to a development centre and a base of courseware companies to utilize them. It can also be expected that this initiative would attract other courseware companies to locate in Manitoba.

Consortium for Industrial Development

A Consortium of community colleges and universities could be created to provide improved training and technology transfer in key areas of economic activity. The Consortium would undertake to develop: a technology transfer office to coordinate and support transfer efforts of educational institutions; a centre for entrepreneurship education with programs targeted to a variety of client groups, particularly natives; infrastructure support for programs in areas such as engineering, engineering technology, CAD/CAM, food processing, and others at the colleges and universities; expansion of small business/manufacturing assistance; and expanded training in the aerospace industry. A Consortium for Industrial Development would require some $19 million in funding over five years.

Construction of a Teleport

Under the ERDA Planning Agreement a March 1985 study indicated construction of a teleport could be undertaken for as little as $5 million. The common access facility would be shared by satellite network users and linked with a number of domestic satellites and international transmission networks. The facility would enhance the communications capabilities of Winnipeg, thus making it a more attractive commercial centre particularly for large users. MTS involvement would be required.

Canada-Manitoba Science and Technology Agreement

In April 1985 the Canada-Manitoba ERDA Ministers signed a Course of Action which included a commitment "... that priority will be given to the signing of a Memorandum of Understanding on Science and Technology to allow more effective coordination of science and technology policies and programs." The Course of Action also committed Ministers to "... finalize arrangements for Science Place Canada in Winnipeg's core area."

Despite several starts in this direction, no Canada-Manitoba agreement has materialized. Saskatchewan, New Brunswick, British Columbia and Quebec successfully negotiated ERDA Science and Technology Agreements at cost-shared levels of up to 70% federal and 30% provincial over 5 years.

Technology-based economic development and intergovernmental coordination and cooperation are central themes of the Western Diversification Initiative. Manitoba is eager to conclude a Science and Technology Agreement with the federal government. It is evisioned that such an agreement could:

- define the science and technology (S&T) development policy framework required for coherent selection of projects;
- enhance existing provincial S&T programs through the provision of matching and complementary federal funds;
- accommodate several project ideas currently being advanced individually to the WDI; and
- provide for new 1988/89 departmental initiatives.

Industrial Development Agreement

The April 1985 Canada-Manitoba ERDA Course of Action included a commitment "...to sign a five year Canada-Manitoba Subsidiary Agreement for Industrial Development" by the end of June that same year. That agreement has yet to be negotiated and concluded.

In addition to fulfilling the 1985 commitment, an Industrial Development Agreement is particularly important in Manitoba's view, given that the WTID program expires March 31, 1988 and the existing IRDP tier structure does not accommodate new developments for Winnipeg.

It is therefore proposed that Canada and Manitoba negotiate and conclude a $75 million Industrial Development Agreement. Suggested components might include:

- Investment Component
  - investment promotion $2 million
  - strategic studies $2 million
  - strategic projects $58 million
  - infrastructure support $7 million
- Trade Component
  - New Exporter Development $2.5 million
  - Collective Exporter Preparation $2 million

As mentioned previously, such an Agreement might accommodate the Program for Advanced Manufacturing Capability proposed in this document.

## C. SUPPORT FOR RESOURCE-BASED INDUSTRIES INCLUDING RURAL DEVELOPMENT AND THE AGRICULTURE SECTOR

### Energy Intensive Industrial Development Program

Encouraging industrial investments in energy intensive industries is a major economic development priority for the Manitoba Government. Our low hydro electric rates and rich mineral resources combined with our diversified economy, labour stability, transportation facilities and competitive industrial land sites are compelling factors for foreign investors (Japan, Korea, Europe, and North America) to locate energy intensive companies in Manitoba. The province has ranked a number of projects which show good growth potential in the medium and long term. Most of these projects use mineral resources available in Manitoba and all are high in value added and include manageable transportation costs. Potential projects for investment include a polysilicon facility, cesium plant, high technology ceramics, plasma technology, an aluminum smelter, a copper refinery, and zinc processing.

While Manitoba cannot expect to match the financial incentive programs of other jurisdictions - either alone or together with the federal government, an allocation of $50 million from the Western Diversification Fund would help to encourage the location of new energy-intensive industries in Manitoba. The Manitoba Energy Authority estimates that projects currently under active consideration could result in as much as $1 billion in new capital investments. They are confident that at least $250 million in energy-intensive capital investments will occur over the next five years.

For further details on the proposed projects, see the attachment "Energy-Intensive Industrial Development Program" (Appendix B).

* Copper/Zinc Processing Modernization at Flin Flon

The copper-zinc processing operations owned by Hudson Bay Mining and Smelting Co., Limited (HBM&S) at Flin Flon are in need of major modernization. There are ten Manitoba mines which feed the copper smelter and zinc refinery at Flin Flon. The complex has been the economic mainstay of northwest Manitoba for the past fifty years. The industry provides 2,200 direct jobs and supports the communities of Leaf Rapids, Flin Flon, Snow Lake in Manitoba, and Creighton in Saskatchewan.

However, the HBM&S operation is now in need of major modernization in order to meet new federal-provincial $SO_2$ emission guidelines to combat acid rain, and to lower operating costs so that the complex can remain economically viable. Modernization is essential to the long-term future of the industry and the communities it supports.

The cost of modernization is approximately $100 million. For the zinc plant the most effective option is the construction of a new Zinc Pressure Leach Plant at a cost of approximately $75 million. This project would virtually eliminate airborne $SO_2$ emissions from the zinc plant and result in significant operating cost savings. At present the best option for the copper smelter appears to be conversion to a Noranda reactor which would cost approximately $25 million.

HBM&S has stated that it is prepared to finance exploration and mine development required to sustain the viability of the company's mining operations over the next three decades, but has requested government assistance in the modernization of the copper-zinc processing complex. The proposed smelter modernization program is designed to achieve the Western Diversification Fund's major objectives of strengthening and diversifying the western economy as well as to meet important national environmental objectives. Therefore Manitoba proposes that the Fund play a major role in financing this proposal.

Chromium Mining and Stainless Steel Manufacturing at Bird River Sill, Manitoba

Chromium is an essential component in the stainless steel-making process. A significant known deposit capable of commercial production exists at Bird River Sill. The deposit is strategically important as it is the only significant chromium deposit in North America. Currently, the stainless steel industry, concentrated in the eastern United States, relies upon overseas supply. Given the possibility of supply disruption from the world's largest chromium producer, South Africa, significant interest exists to secure alternate and secure sources of supply. It is therefore proposed that $5 million be allocated from the Western Diversification Fund for the purpose of conducting a detailed economic and engineering feasibility study required to develop Manitoba chromite reserves, and to process chromium ore into stainless steel products for Canadian and U.S. markets. Preliminary studies indicate mining chromite would not be economic for the sole purpose of exporting chromium ore to U.S. markets. It would be, however, feasible if the mining operation is integrated with an onsight stainless steel-making facility.

* Sustainable Base Metal Supply Projects, Northwestern Manitoba

Increased and continued exploration and development would contribute to the continued operation of HBM&S' copper/zinc mining and smelting facilities near Flin Flon and Leaf Rapids. To stabilize the economic base of Manitoba's northern economy, a minimum investment of $12 million is proposed for a sustainable base metal supply project. The project would locate, delineate, and develop sufficient base metal sources to maintain a steady ore flow to Manitoba's smelting operations.

Diversification of the Bernic Lake Mine Production

The Bernic Lake Mine, located about 35 miles northeast of Lac du Bonnet, has the potential to produce several rare mineral commodities from one of the world's largest pegmatite ore bodies. Production is concentrated on tantalum, and to a lesser extent cesium and lithium. The volatility of these commodity markets poses a high economic risk to the production facility. Further diversification is required to increase product mix and diminish reliance on cyclical world prices. Assistance in the order of $1 million would enable the addition of another processing circuit at the mill site and the mining of potassium and rubidium feldspar.

The Application of Tertiary Enhanced Oil Recovery Technology in Manitoba's Oil Fields

Manitoba produces just over 1% of Canada's petroleum supplies. Current established reserves in Manitoba indicate just over 10 years of oil production remains under primary and secondary recovery methods. There are, however, other non-producing areas in the province with known oil reserves which may only be recovered by tertiary means. There is very little research testing the feasibility of implementing tertiary recovery programs in Manitoba. It is therefore proposed that feasibility tests costing $500,000 be undertaken to establish pilot projects at existing well-head sites. If the tertiary recovery processes prove effective, their application could be a significant factor in increasing total petroleum reserves in the province and elsewhere in Canada.

Canada-Manitoba Subsidiary Agreement on Municipal Water and Waste Disposal Infrastructure

It is recognized that many of Manitoba's rural and Northern communities face special water supply and waste disposal problems. As such, a five year, $60 million federal-provincial cost-shared program of improvements to the water and waste disposal infrastructure of Manitoba's rural and Northern communities is earmarked as a potential initiative under the Western Diversification Initiative.

The primary objective would be to alleviate constraints posed by inadequate water supply and waste disposal systems in certain communities in order to:

- facilitate, where appropriate, the growth of industrial enterprises including agricultural processing and service enterprises in these centres;
- to allow for development and growth of communities;
- to improve the quality of life and preserve the health of residents of rural and Northern communities; and
- to protect the environment.

The communities would include, but are not limited to, Brandon, Portage la Prairie, Dauphin, and Flin Flon.

Agricultural Biotechnology and Training Consortium

It is proposed that an Agricultural Biotechnology and Training Consortium be developed, consisting of the University of Manitoba, Brandon University, and Assiniboine Community College, in cooperation with agricultural organizations and the private sector. The Consortium would focus on: developing applications in agricultural biotechnology; providing agribusiness and agricultural management training; international marketing of agricultural services; and undertaking research and services related to the sociological aspects of agriculture (such as farm stress or women in farming).

Funding in the order of $7 million would be required over the next five years to support the development of the Consortium.

River Renewal

River Renewal is a major and significant priority for Manitoba. The objectives of such a program are broad and varied -- ranging from tourism, recreation and heritage resource enhancement to water quality improvements, diversions, and lake rehabilitation. Funding in the neighbourhood of some $120 million from the Western Diversification Fund would complement and enhance anticipated river renewal commitments by the province, Winnipeg and rural municipalities. The program envisages a number of initiatives, including:

- A Winnipeg River Authority involving a tri-level partnership among the federal government, the City, and the province. The Authority would oversee quick-start projects such as Buchanan Marina site development, riverbank stabilization/promenade development, linear trails and bicycle paths.

- ARC renewal with emphasis on recreation and conservation along Assiniboine and Red and, possibly, tributaries; establishment of heritage corridors combining historic sites, scenic landscapes, fish and wildlife enhancement, interpretive sites, tourist accommodation.

- ERDA Sub-Agreement on Environment and Economic Development with emphasis on linkage between environmental upgrading and economic development. The initiative is proposed as follow-up to the report on the "National Task Force on the Environment and Economy", adopted by the Canadian Council of Resource and Environment Ministers. The approach is premised on the principle that economic development should be compatible with the region's environment and not preclude the full use and enjoyment of the region's environment and resources. Portage la Prairie is an example of a potential area. Economic opportunities exist in the agricultural and agri-food processing sector, while recreational opportunities exist for tourism and parks development as well as fish and wildlife enhancement and use. Projects could include infrastructural upgrading and development as well as incentive funds for industrial, commercial and tourist facility investment.

- Construction of Festival Market in Winnipeg's city centre on riverfront site in Exchange District or the East Yards.

- Expansion of Lower Fort Garry to develop the living history farm component.

- Providing incentive assistance to municipal governments for the enhancement of riverbank resources within their jurisdiction.

- Develop Beaudry Provincial Park - Interpretive Centre, Metis farmstead, and tall grass prairie restoration ($4.8 million).

- Interlake Region - development and maintenance of provincial waterway infrastructure to remove excess precipitation from agricultural lands to improve soil productivity ($38.1 million).

- Carman Diversion ($10.0 million) - flood protection for the town of Carman.

- Assiniboine River to Boyne River Diversion ($4.3 million) - divert water for municipal and irrigation purposes.

- Dauphin Lake Rehabilitation ($7.6 million).

- Pembina River Lakes (Pelican, Rock, and Swan Lakes) - Water Quality Improvements for recreation and fisheries ($5.6 million)

- Washow Bay ($6.8 million) - remove excess summer rainfall in order to enhance soil productivity and farm viability.

Rural Industrial Project

It is proposed that a rural area of Manitoba, with little industrial development activity and high unemployment rates relative to the rest of Canada, be designated as a site for a $60 million oriented strandboard (OSB) plant. The plant would create 130 direct jobs plus woodlands and hauling. OSB is a replacement for plywood. The market is growing at an estimated rate whereby 47 new OSB mills will be built within the next 13 years -- 39 in the U.S.A. and 8 in Canada. The proposed plant would export roughly 80% of production to U.S.A. markets, in areas where there is no plywood production.

Construction of the OSB plant requires $10 million in direct government support. Additionally some $13 million may be required for new and upgraded roads over the long term. Benefits of the proposed project include employment for native people and others, utilization of unused hardwood resources, improved tourism access, and the creation of a major exporting business.

Conservation Stewardship Initiative

The federal government's A Framework for Diversification in Western Canada emphasizes the importance of Western Canada's wetlands and wildlife:

> "There is increasing economic and environmental focus on western Canada's wetlands and wildlife, especially waterfowl. Poor wetland management not only endangers western wildlife but is having a negative impact on prairie agriculture by increasing soil erosion and soil and water degradation. Wildlife related activities now represent a significant economic sector which could be put at risk unless remedial action is taken."

The Manitoba Government therefore proposes a significant allocation of financial resources towards this objective. The following is proposed:

- A $20 million Land Management Program for Agriculture and Wildlife - The program would focus on rehabilitation of marginal agricultural land for the mutual benefit of agriculture and waterfowl resources. Activities would include acquisition and leasing of critical habitats and the development of alternate land uses to diversify agricultural opportunities and increase waterfowl production.

- A $9 million enhancement and expansion of Manitoba's Conservation Districts - This initiative would support implementation of the national Agriculture strategy in soil and water conservation and development. It would also support new initiatives in wildlife management, especially waterfowl habitat with the goal to maximize benefits to wildlife in conjunction with prairie agriculture.

- $2.5 million for the purchase of critical land parcels in Conservation Districts required to preserve soil and water quality and productivity.

- $10 million for construction and maintenance of infrastructure required to reduce crop losses due to excess rainfall in Conservation Districts.

Downtown Revitalization Program

A $10 million program is proposed to stimulate and revitalize business communities in rural Manitoba suffering slow economic growth and low level business activity. The program would provide assistance to urban centres in Manitoba with redevelopment of their downtown commercial areas through the preparation of downtown redevelopment strategy, land assembly and development proposal. Financial assistance would be provided for storefront rennovation to business located in main business districts and to municipalities for improvements to public areas in these same business districts.

Rural Investment Funds

Rural Manitoba, due to changes in resource-based industries, is undergoing profound chronic structural change which for a variety of reasons is weakening its business infrastructure or the necessary framework for wealth and job creation. To support the development of new rural enterprises which exploit unused or underutilized resources, it is proposed that a $10 million rural development fund be established under the administration of regional or community development corporations. Examples of commercial development opportunities include the use of raw fish for animal foods, fertilizers, leather goods and human food. The Aspen forest potential for paper production using chemi-mechanical technology and aqua-culture developments based on the freshwater fishery are other examples. The fund could also support commerical tourism enterprises.

Upgrading Rural Telephone Services (Universal Individual Line Service, UILS)

There are some 48,000 multi-party line residential and business customers in rural Manitoba. Upgrading rural telephone services to universal individual line service (UILS) would allow rural customers to enjoy the same level of service as that of urban dwellers. Aside from the obvious benefits of privacy, immediate access, and so on, rural customers would have access to data services not presently available to multi-party line subscribers.

At the current time, MTS is undertaking a 15 to 18 year, $350 million digital conversion modernization program. If rural telephone services were to be upgraded in conjunction with the modernization program, an expenditure of $102 million would be required. An accelerated plan to upgrade rural telephone services would require, however, further capital expenditures in addition to the $102 million. For example, a five year (as opposed to 15 to 18 year) rural upgrading program would require up to an additional $90 million for a total of $192 million, together with a significant advancement in the $350 million digital conversion.

The Western Diversification Initiative could provide the means of upgrading telephone services throughout Manitoba and thus enable all customers to enjoy the benefits of universal individual line service.

* Atikaki "World Class" Wilderness

Atikaki Provincial Park, located east of Lake Winnipeg, has potential as a "world class" wilderness park. Development of such an attraction requires: improvements to the park's southern access via air and water; incentives for establishing and improving accommodation, outfitting services, and marketing local handicrafts; hospitality and guide training for residents of local communities, high profile promotion and tour packaging program; and coordination with Ontario's Woodland Caribou Wilderness Park. In addition to enhancing the province's tourist attractions, development of Atikaki offers an excellent opportunity for Native community involvement. It is recommended that $3.3 million be allocated from the Western Diversification Initiative for the development of Atikaki Provincial Park.

## D. INFRASTRUCTURE SUPPORT

Winnipeg Convention Centre Technological Enhancement

A $4.5 million refurbishment and updating of the Winnipeg Convention Centre technological systems is proposed in order to improve the centre's ability to compete in the international marketplace with newer convention centres in other Canadian cities. Other large urban centres have received federal assistance to construct competing and more technologically advanced convention centres or trade centres.

* All Weather Road for Communities on the East Side of Lake Winnipeg

Communities on the east side of Lake Winnipeg lack year round surface transportation. To reduce the isolation and remoteness of these communities, an all weather road network is required to provide connection to the permanent road network, as well as a year round inter-community road network. The road would also provide access to the areas significant potential natural resources -- forestry and silva culture, tourism, mineral exploration, and possibly mineral extraction and processing over the longer term. Road construction would employ local natives. Upon completion, longer term employment opportunities would be available in the aforementioned developing natural resource industries. In addition, the quality of life in the communities on the east side of Lake Winnipeg would be greatly enhanced through reduced freight costs from southern markets, affordable and dependable year-round passenger transportation, and easier access to the rest of Manitoba. Communities involved would include Bloodvein, Berens River, Poplar River, Little Grand Rapids, and Paungassi along the Rice River Road.

Completion of the road from the existing all-weather road near Hollow Water to Bloodvein would create the opportunity to facilitate a circular tourism route utilizing Hecla-Grindstone Parks on the west side of the Lake. A ferry would be required to transport travellers across the lake to the new road. A Winnipeg-Hecla-Grindstone-Winnipeg circular tourist route would then exist. The circular tourism route would facilitate the development of accommodation such as motels and campgrounds in the Bloodvein area and on Provincial Road 234 to serve both tourists travelling the route and Atikaki Wilderness Park visitors.

Road construction in this area of the province is a costly undertaking ranging from $200,000 to $600,000 per mile, depending on location, to build to minimum standards. Costs of construction could vary from $30 million to a total cost of $75 million, depending on the extent of the undertaking. Only through such a program as the Western Diversification Initiative could such a major undertaking be contemplated by the Manitoba Government. Private forestry firms could also be invited to share in the expenditure as the new road network would provide access to significant new timber stands.

Location of the Western Headquarters of the National Transportation Agency in Winnipeg

Bill C-18, "An Act Respecting National Transportation" proposes a National Transportation Agency replace the current Canada Transport Commission. The nine-member agency would hold hearings, sittings, investigations, enquiries; make decisions, orders on entry-exit rates, service and acquisitions as delineated by the National Transportation Act; follow policy directions issued by Cabinet; enquire into any matters concerning transportation under federal authority, at Ministers' requests; and assist or act in mediation and arbitration of disputes.

As a major transportation centre in western Canada and the national gateway to the west, Winnipeg is the logical choice to anchor the federal government's western NTA headquarters. A Winnipeg location would reinforce Manitoba's role a major transportation hub, create jobs, and possibly result in the relocation of regional headquarters of transportation firms.

"The Forks" Development Initiative

A package of initiatives amounting to some $40 million is proposed to underscore the significance of the Forks in the historical and cultural development of both Winnipeg and western Canada. Development of the Forks would result in a major national tourism attraction to Winnipeg's core area. The initiative could include:

- Construction of a new CBC production facility which would allow for public access to production capacity for children's, multicultural, and French language productions.

- A Multicultural Centre - emphasizing Manitoba's cultural heritage, this significant tourist attraction is conceptualized as an international village, incoporating construction design of various ethnic communities. The multi-use facility would feature multicultural activities and performances, ethnic handicrafts and foods, and ethnic/cultural organizations.

* - A Western Canada Interpretive Centre - It is proposed that Parks Canada undertake a program to interpret the historical significance of the "Forks" site, including the precontact period, the exploration of the west, the fur trade era, settlement of the west, and the railway era. It is also anticipated that the Forks development will require excavation that will uncover prehistoric and historic burial sites containing human remains. An Interpretive Centre accompanying Forks development might be a satisfactory means of enlisting native support.

- A major native facility which emphasizes the role and participation of native people, Indian and Metis in Manitoba and the west.

- A railway museum displaying vintage locomotives and interpreting the major Manitoba/Winnipeg role in the railway era.

- A major aquarium development featuring marine life, such as Beluga Whales, from Churchill.

- A Western Canada Centre for Economic Development - The intent is to establish a "centre of excellence" for western Canadian urban and rural economic development issues. The centre would undertake research to develop effective methods of economic development for urban and rural communities, would serve as a resource centre for Canadian entrepeneurs and governments, and would train and develop urban economic development professionals.

- Other special projects such as a science museum, etc.

- And private sector initiatives.

Urban Infrastructure Upgrading, City of Winnipeg

Urban infrastructure upgrading in the order of some $223 million is urgently required for Winnipeg. A 1985 study undertaken for First Ministers indicated that an additional $12 billion would be required in the next five years to upgrade municipal infrastructure to acceptable levels. While cost-sharing with the cities is expected, there is a long history of federal funding for infrastructure as there is a positive impact on municipal/regional economic development. Rebuilding and replacing aging infrastructure would include roads, sidewalks, bridges and grades separations, sewers, water supply and distribution networks, transit facilities, and parks and recreation facilities. Such undertakings would benefit strongly all sectors of the construction industry as the work is strongly labour intensive.

* Shoal Lake: Securing Winnipeg's Water Supply

A $60 million Community Water Services Agreement for rural and northern Manitoba communities is currently being negotiated under the framework of the Western Diversification Initiative. Given that more than one-half of the province's population relies on Winnipeg's water supply, funds from the Western Diversification Initiative should also be allocated to secure Winnipeg's water supply. It is therefore proposed that $27 million be allocated from the Western Diversification Fund for the purpose of buying the development rights of Shoal Lake. The project would enable Manitoba to secure a protective area around the City of Winnipeg's water supply and to assist the Shoal Lake Indian Bands No. 39(a) and 40 to relocate and to develop a sustainable economic base for its communities.

Rapid Transit Corridor, City of Winnipeg

Winnipeg is one of the few major cities in Canada lacking a rapid transit system. Plan Winnipeg proposed a system of exclusive rapid transit corridors for the City of Winnipeg, costing in the neighbourhood of $200-250 million.

It is generally recognized that busways reduce travel times and improve levels of service thereby increasing transit ridership and revenues. A busway system would reduce operating costs by an estimated $2 million annually, or approximately 3% of current transit system expenditures. Busways also provide capacities equivalent to LRT systems at one-tenth the cost.

In addition, rapid transit generates economic benefits to urban development. It can be used as an economic tool in planning the development of urban areas and in concentrating economic development in accordance with local development objectives. A more efficient concentration of urban activities results in increased tax revenues and reductions in municipal service costs. Rapid transit also reduces the requirement for costly infrastructure renewal and expansion, i.e. more concentrated development patterns can alleviate pressures for suburban development and more efficiently utilize existing services (schools, libraries, roads, etc.).

Further benefits of rapid transit systems include energy conservation, reductions in noise and air pollution, reduced need for expensive upgrading of the street network, and job creation. With regard to the latter benefit, a recent U.S. report concluded that up to 7,700 direct and indirect jobs are generated by every $100 million spent on transit capital projects.

It is therefore proposed that the Western Diversification Initiative allocate substantial resources to establishing a fully integrated rapid transit system which would serve all areas of Winnipeg.

Upgrading Post-Secondary Education Facilities

Learning Resource Centre for Red River Community College. A new Learning Resource Centre is an urgent requirement. The existing 22,000 square foot Learning Resource Centre at Red River Community College was built in 1969 to accommodate the needs of 2,700 students. In the intervening 18 years, the population requiring access to the Centre's resources has grown to well over 5,000 full-time and several thousand part-time students, both on and off campus. The size of the collection, the level of service and the number of staff have grown to meet the needs of the student population and, as a result, the facility is now extremely cramped and crowded. Future development of service and the collection to meet the needs of the college's varied clientele will be severely limited without additional space.

Other factors contributing to the critical need for additional space include:

- The rapid pace of technological change has produced a dramatic increase in the volume of print materials which requires additional shelf storage space. At the same time, non-print materials, such as computer software and audio-visual materials have become an integral part of students' learning tools. The present learning resource centre has no adequate space for the micro-computer and audio-visual equipment needed to support the students' needs.

- An increasing proportion of the college's programs of study are offered in modules which increases the amount of time students must spend on independent study. The current centre lacks adequate study space.

Architectural planning is proceeding in the current fiscal year. It is estimated the proposed Centre will cost $7 million.

Residence Facilities for Keewatin Community College in The Pas.

In June of 1983, the Keewatin Community College Residence Task Force, which received representation from Native organizations, business and community groups, faculty, and students, recommended additional student housing be constructed at the college.

The provision of more appropriate residence accommodation is considered a key factor in reducing the high drop-out rate (30%) at the college and enhancing the access of northern residents to college programs.

Approximately 90% of KCC students are from outside the immediate community. The new residence facilities would accommodate student families, thereby preventing the disruption of the family unit while a parent is in training. The college has a disproportionately high number of single parents among its student body. The problem for students with families is compounded by the lack of rental accommodation in The Pas. The renovated facility would also include a day care, which will provide a training facility for students in the LPN program and the planned child care worker and diploma nursing programs.

Improvements to the residence, in the order of $5.4 million, are required in order to provide facilities conducive to humane living and to provide student supports that will improve the effectiveness of the learning process.

Provincial Highways Upgrading

In almost every developed country in the world, national governments have assumed responsibility for a national highway network in recognition of the importance of road transportation to the economic and social well-being of their nation. All western European governments, including Great Britain, have built and operated a network of national highways.

In the United States, the Federal Highway Administration administers a highway user tax fund, financed mainly from a federal fuel tax, which provides funding for major developments of the highway system throughout the country. The 45,000 mile Interstate system was constructed with 90% federal funding from this program. As well, other eligible primary and secondary state highways receive 75% and 50% of their capital funding respectively from this same federal program. It is estimated that federal funds account for between 25% and 35% of all state highway construction programs.

In Canada, federal involvement in highway funding has been sporadic and of an ad hoc nature. In recognition of the need to provide a transcontinental highway link across Canada, the federal government passed the Trans-Canada Highway Act in 1949, through which federal funds were provided to the Provinces on a 50/50 basis to construct a two-lane highway across the nation to facilitate the movement of goods and people. The Act was amended several times during the next two decades, until in 1970 a 4,800 mile paved two-lane highway stretched from coast to coast. Upon the completion of the Trans-Canada Highway, the provincial governments assumed total responsibility for its upkeep and upgrading.

In the late 1970's, the federal government provided some funding assistance to strengthen portions of the Trans-Canada Highway in response to significant increases in allowable truck loadings. Other than the highway strengthening program, however, the federal government's contribution to highway infrastructure has been limited.

The Canadian approach has placed a heavy burden on the provincial governments. A number of factors have forced the provinces to spend considerable funds on upgrading and rehabilitating the highway system. These factors include increasing traffic volumes, the continuing modal switch from rail to road, and the trend towards allowing heavier vehicle loadings, as exemplified by the recently proposed Interprovincial Heavy Vehicle Weights and Dimensions.

It is therefore proposed that the Western Diversification Initiative allocate substantial resources to provide for general highways upgrading on main trade routes. Highways upgrading would include initiatives such as the four laning of PTH #75 from Ste. Agathe to the U.S.A. border and PTH #59 to Grand Beach.

Increased Highway Load Limits in Manfor Haul Areas

Potential purchasers in the Manfor divestiture discussions have identified increased highway load limits in the Manfor haul areas as a necessity to the plant's economic viability. Increased load limits would enable truckers to bring wood into the plant in tree-length form. Slashing, sorting and debarking would be undertaken at the plant instead of at the tree falling site. Significant cost savings to Manfor would result, as well as allowing Manfor to modernize its woodyard. In order for Manitoba to increase its load limits, federal assistance would be required to undertake the necessary highway strengthening and bridge improvements. This initiative is proposed in conjunction with the intent to standardize highway load limits across Canada.

Western Canada Grain Handling and Storage Industry Marketing and Training Centre, Winnipeg

It is proposed that a Western Canada Grain Handling and Storage Industry Marketing and Training Centre costing $3 million over five years be established and headquartered in Winnipeg with a dual mandate to:

1. Identify, promote and actively pursue market opportunities in off shore countries for Western Canadians goods and services related to the grain handling and storage sector.

2. Provide a facility which would enable Western Canadian suppliers of equipment and technology in the grain handling and storage sector to further develop and test products and technology, as well as a training centre for users of these goods and services. No such facility currently exists in North America.

It is expected that this initiative will, at the very least, directly effect 50 Manitoba companies and result in the creation of 340 new jobs and contribute $11 million annually to Manitoba's GDP. Benefits to other provinces will vary, depending upon the level of capabilities present and the desire of companies to participate in the iniative.

* Conawapa Generation Station and Transmission Facility

It is forecast by Manitoba Hydro that load growth will require the addition of the 1400 MW, $3.0 billion, Conawapa generation station in the late 1990's. The operation of Conawapa would result in the need for a third transmission facility, Bipole III, from the north costing about $1.8 billion.

The Province of Manitoba has borne alone -- without federal government assistance -- the entire construction costs of its hydro-electric generating facilities. The federal government has extended assistance, however, in the form of repayable loans ($438 million) in the financing of both major transmission lines now linking Manitoba's northern hydro generating plants with population centres in the south.

Federal assistance in the development of Western Canada's oil and gas industry has been, and still is, substantial. It has been estimated by Manitoba Energy and Mines that federal assistance to the oil and gas industry is in the neighbourhood of 50% of the costs. For example, the financing of the Syncrude project, although somewhat dated, provides an illustration. Of Syncrude's total $2 billion cost, the public sector outlay (including direct assistance, loans, tax write-offs, depletion allowances, etc.) was $1,472 or about 75% of the total costs.

Further information from the Manitoba Energy Authority indicates that from 1979-1982, the oil and gas industry benefitted $6.5 billion through foregone federal tax revenues. Before the Petroleum Incentive Program was terminated close to $7 billion was allocated through that initiative to oil and gas development. In 1985 alone, the federal government provided $2.74 billion to the oil and gas industry through depletion allowances, depreciation, exploration incentives and writeoffs. Other contributions by the federal government have been made to extend oil and gas pipelines, assist in heavy fuel upgrading and other oil and gas related projects.

It is therefore proposed that the federal government extend financial assistance in the construction of Manitoba's next hydro electric dam, Conawapa. The level of assistance should be of the same order of magnitude as that extended to Western Canada's oil and gas industry in recent years. In addition, federal assistance should be sought for the $1.15 billion construction of Bipole III to support Conawapa.

## E. HUMAN RESOURCE DEVELOPMENT AND WOMEN'S ECONOMIC EQUALITY

### Skill Training Initiatives

As the intent of the Western Diversification Initiative is to undertake initiatives to strengthen and create high priority industries, then it will be necessary to ensure that workers are trained for the jobs that will become available. It is therefore proposed that the fund allocate $12 million annually in incremental federal expenditures to support post-secondary training, training in industry, and special access programs designed to prepare Manitobans for highly skilled occupations in emerging industries. The program, which could target women and natives as a specific client group, would consist of three components:

1. Post-Secondary Training ($5 million): Expanded technical training in Manitoba's community colleges and universities for occupations which will be required by employers in high priority sectors.

2. Training in Industry ($5 million): Support for employer-based training, to enable employers in emerging industries to upgrade the skills of their present workforce and/or train new employees.

* 3. Special Access Programs ($2 million): Academic upgrading, support services and hiring/training incentives to assist less advantaged Manitobans in gaining access to high skilled jobs or training opportunities.

### Women's Economic Development Corporation

Manitoba has given a high priority to women's economic equality. As such, it is important that women are also beneficiaries of the Western Diversification Initiative. This can be accomplished through two means: special measures and integration.

- Special Measures - Establishment of a Women's Economic Development Corporation: Modeled after the Minnesota-based Women's Economic Development Corporation (WEDCO), this project would assist the startup and expansion of small businesses run by women. A Women's Economic Development Corporation would be a non-profit corporation which would stimulate economic growth directly by increasing women's access to financial resources and acting as a catalyst in the area of business development. The corporation would have a specific focus on community-based projects, non-profit sector businesses and co-op business ventures, and would devote a significant percentage of its resources to providing assistance to native women and other women who traditionally do not have access to the resources of financial institutions. It is suggested that the Western Diversification Fund allocate $10 million to the establishment of a Women's Economic Development Corporation.

- Integration: One of the most significant ways to enhance the economic development of women through development and diversification projects would be to adopt a principle of integrating women into all projects developed. Women should be considered equal participants in the awarding of contracts to businesses, including research. A number of measures should be written into all projects, namely pay equity, affirmative action and effective contract compliance mechanism. A comprehensive WDI training component for women would ensure job creation benefits flow to women as well as men. Support services such as day care would also facilitate women's participation in the WDI.

Employment Cooperative Initiative

The Manitoba Government has a strong commitment to the development of employment cooperatives. Employment cooperatives provide for greater employee ownership and control of their employment environment in jobs. Over the past three years over 30 employment cooperatives have been incorporated in Manitoba, creating new jobs and averting loss of others. Part of the difficulty in establishing employment cooperatives is lack of resource groups that can assist employment cooperatives to become operational following incorporation. A fund for development or resource groups and support systems in the amount of $1 million under the Western Diversification Initiative would impact on the ability to create diversity of employment opportunities using the employment cooperative model.

* Promotion and Development of Utility Cooperatives in Rural and Northern Manitoba

Over the past few years over 25 sewage and water co-operatives have been developed in rural areas where the municipal revenue base is insufficient to provide the services. Provision of sewer and water services has an immense impact on the agricultural sector of our province, not only in terms of reducing operating costs and improving lifestyles, but also in terms of expansion of operations, increased employment opportunities and reduced outmigration to urban centres.

Rural groups also have expressed an interest in acquiring assistance in establishing a natural gas distribution system on a cooperative basis where the distributor shows little or no interest in providing these services.

It is therefore proposed that the Western Diversification Fund allocate approximately $1 million to the further promotion and development of utility cooperatives in Manitoba, specifically development of sewer and water coops and feasibility studies into the establishment of natural gas distribution coops.

* Urban Native Renewal Effort

Since the early '70s, a large number of natives have migrated from rural/northern reserves to urban centres. Migration has been most pronounced in Western Canada, particularly Saskatchewan and Manitoba. Migrating natives tend to be unskilled and poor, with a disproportionate number being female single heads of households. Existing policy and program responses by all levels of government have been fragmented and inadequate. Either new money could be identified for training and economic development initiatives or equally important a more strategic policy framework could be developed cooperatively with Canada and other western provinces to guide current expenditures more effectively. Alternatively, a bilateral Canada/Manitoba initiative could be undertaken.

An Urban Native Renewal Effort could be accommodated through either the Western Diversification Initiative or through a special allocation for Native Development. Whatever the mechanism, support for the needs of urban natives is an urgent necessity.

Service Sector Initiative

Manitoba's service sector contributes significantly to the diversification of the provincial economy. It is proposed that $16 million over five years be allocated for the support and expansion of further service sector activities. Activities could include:

- Development of a National Child Care Training Centre ($6 million) as a joint project of the universities and community colleges - Manitoba is highly regarded, on a national basis, for its well developed provincial child day care program. Over the years child care professionals in the province have developed considerable expertise in the area. A Child Care Training Centre would build upon this core of knowledge and become a national centre for future child care training and research.

- Expand export capacity of Manitoba's service sector ($2 million) - A consortium of educational institutions, non-profit organizations, and private sector firms would undertake (a) to provide technical assistance to less-developed countries and (b) direct marketing activities in more developed countries. Specific areas targetted for overseas investment in Manitoba would include health services, human services, business services, energy, agriculture, and others where Manitoba has recognized strength.

- Development of college/university training programs in the area of human services, with generic applicability to many emerging fields of work, such as geriatrics, community placement, corrections, and others ($8 million).

* Educational Development Initiative

It is proposed that $23 million be allocated over the next five years to strengthen educational activities in three key areas:

- Educational technology, including computer-assisted distance education, to bring educational opportunities to a dispersed population ($5 million)
- Expansion of highly successful programs providing technical and professional training to Natives, immigrants, and other target groups ($8 million)
- Infrastructure support for colleges and universities in areas such as equipment upgrading, endowed chairs, and young scholar programs ($10 million).

ERDA's - RENEWALS

* Renewal of Canada-Manitoba Subsidiary Agreement on Churchill

The federal government's Framework for Diversification in Western Canada stated Ports Canada will encourage development and upgrading of the Port of Vancouver to ensure it remains a competitive outlet for western Canadian products and resources. The Province of Manitoba seeks a similar commitment to the Port of Churchill, Canada's only northern port and additional gateway to the east.

Accordingly, it is proposed that Canada and Manitoba renew the current Churchill Agreement which was signed in 1984 and provided $93 million. It is suggested that a renewed Agreement should allocate substantially greater financial resources, given the highly credible initiatives being proposed. A renewed Agreement could be financed through a variety of mechanisms, including the Western Diversification Initiative or a separate Native and Northern Development Fund.

The initiatives proposed to secure the future of the Port of Churchill include:

- A $13 million investment in Port of Churchill capital improvements to ensure ongoing operation, to reduce operating costs, and to improve the Port's efficiency in shipping grain to destinations across the Atlantic.

- $10.9 million for the construction of a new Churchill grain gallery to increase grain loading capacity of the Port by 20%.

- $1.3 million for tourist transport improvement (tundra buggies, boat docking facilities, and tour boat) to enhance and expand the region's significant tourist resources. Quality of transport facilities are crucial to the success of Churchill's unique tourist features, particularly polar bear watching and boat tours to western Canada's historic Fort Prince of Wales.

- The designation of Cape Churchill as a UNESCO "World Heritage Site" and with development of a major visitor interpretive centre requiring $4.4 million over five years.

- The designation of Churchill as a Canadian base for "Arctic sovereignty" efforts.

- $168 million to construct a fleet of articulated hopper cars -- a lightweight, low centre of gravity car specifically designed to cope with the unique dynamics of light density lines, specifically the line to Churchill.

- $105 million to stabilize northern railway roadbeds which are under considerable stress due to location in discontinuous permafrost zones. Stabilization of the Churchill line would provide a reliable rail network to Manitoba's northern communities.

Some of the above initiatives would provide significant opportunity for the export of Arctic technology, particularly articulated hopper cars and roadbed stabilization.

Canada-Manitoba Subsidiary Agreement on Transportation Development

On April 13, 1984 Manitoba and Canada signed a $137.6 million sub-agreement on transportation development. The Agreement called for major federal development at Winnipeg International Airport and other air transportation facilities, provincial improvements to Manitoba's highway system, improvements to the Winnipeg VIA station, shared participation in an inter-city railbus program and transportation research projects. The sub-agreement is nearing the end of its term and should be renewed.

The Transportation Agreement renewal could include funding for the following transportation intiatives:

- Lump sum payment for the Road Impact due to past branch line abandonments ($50 million);

- General aviation air terminal and hangar facilities at Winnipeg International Airport ($5 million);

- Winnipeg International Airport as a gateway for international and transborder flights ($2 million);

- Canadian railbus ($1 million);

- Hovercraft demonstration ($500,000).

Canada-Manitoba Forest Resources Development Agreement

It is proposed that the current $27 million Canada-Manitoba Forest Renewal Agreement be extended/renewed for the life of the current ERDA to 1994. The renewed agreement could commence at the expiry of the current agreement (April 1989) and would be structured in a similar fashion but with increased involvement by the industry sector. It is expected that C.F.S. would deliver the federal component of the project.

A renewed agreement, involving $50 million in federal-provincial cost-shared expenditures, would ensure the ongoing maintenance of Manitoba's forestry industry and utilize investments made during the current five year Agreement. A renewed agreement would meet criteria outlined in A Framework for Diversification in Western Canada:

- maintain competitiveness of current forest industry;
- maintain and expand research and technology transfer in forest sciences; and
- allow for potential expansion of existing forest industry in terms of timber availability.

Expansion and Extension of Canada-Manitoba Tourism Agreement

An expansion and extension to the current $30 million Canada-Manitoba Tourism Development Agreement could accommodate some of the initiatives Manitoba is proposing for the Western Diversification Initiative -- specifically, some of the components of the River Renewal Program and tourism components of the East Yards or "the Forks" project. An expansion of $23 million is proposed.

In addition, the current Agreement allocates $5.0 million to tourism marketing activities. Demand has been such that resources can be fully committed prior to the termination of the Agreement. It is therefore proposed that a further $3 million be allocated to "top up" marketing initiatives. Specific projects could include:

- A three year pilot project to establish a Minneapolis Travel Office ($500,000). The possibility of sharing such an office with Saskatchewan could be explored.
- Interprovincial Co-op Angling and Wilderness Adventure Advertising Campaign ($1 million) - promoting these Manitoba and Saskatchewan sports to the North Central States over a 5 year period.
- Tour packages designed to develop the Japanese travel market into Saskatchewan and Manitoba focussing on the urban travel product, sports angling, and VIA rail tours ($300,000 over 3 years).
- Support to the Winnipeg multicultural advertising program ($250,000 over 5 years).

Renewal of Canada-Manitoba Mineral Development Agreement

The objective of the current Canada-Manitoba Mineral Development Agreement (MDA) is to strengthen and diversify the mining and mineral processing industry, an important component of the provincial economy and the principal source of economic activity and employment in Northern Manitoba. The $24.7 million Agreement provides for the management and coordination of federal and provincial research and development projects in the areas of geoscience, mining and mineral technology, marketing and development, and public information. It will expire March 31, 1989.

It is proposed that the Canada-Manitoba Mineral Development Agreement be renewed for another 5 year period. It is expected that a new agreement would contain similar provisions as the current MDA and would require in the order of $30 million. The exact terms the amount and share of resources to be contributed would be a function of a final evaluation of the current MDA.

Communications and Cultural Enterprises Agreement

A Framework for Western Diversification emphasizes export strategies and international markets. With regard to film development, Eastern Canada's larger feature film community is in a better position, relative to the smaller Western film community, to take advantage of international opportunities. The international emphasis may well hamper any broadcasting, film and video developments in Western Canada.

However, the demand for Western Canadian product for Canadian consumption may increase dramatically if the C.R.T.C. approves B.C.'s application for a new cable network, T.V. Canada. T.V. Canada will consist of a total Canadian product, paid from cable subscriptions.

Manitoba's Communications and Cultural Enterprises Agreement provides a program of support for the development of such films, but the expanded need may well be in excess of available funds. In addition, the Agreement is due for renewal or extension in 1989.

It is therefore proposed that the Communications and Cultural Enterprises Agreement be renewed or extended and enriched to accommodate the development of Canadian film required to meet the anticipated increased demand if the T.V. Canada application is approved.

Agri-Food Agreement Extension

It is proposed that the current Agri-Food Agreement, expiring in 1990-91, be extended another three years. The Agreement's objectives are in line with the agriculture thrust described in A Framework for Diversification in Western Canada -- ie., accelerating technological transfer and resources conservation and development initiatives. An extended Agreement could also accommodate the Carman Diversion, Washow Bay (removing excess summer rainfall in order to enhance soil productivity and farm viability) and other related water management issues.

It is suggested that a 60:40 federal-provincial cost-shared arrangement form the basis of the extension, with federal funding in the neighbourhood of $15 to $20 million. Provincial funding would continue at the current levels of the existing Agri-Food Agreement.

FURTHER INFORMATION REGARDING THE PROPOSAL FOR AN ENERGY-INTENSIVE INDUSTRIAL DEVELOPMENT PROGRAM (page 9)

Introduction

The Manitoba Government has set as a priority an economic development initiative to encourage industrial investments in energy-intensive industries. Manitoba is endowed with the lowest hydro-electric rates in North America and rich mineral resources. These factors combined with its diversified economy, labour stability, transportation facilities and competitive industrial land sites should present strong incentives to offshore companies to locate in our province.

Our recent marketing activities in Japan, Korea, Europe and North America with selected energy-intensive companies, have resulted in a strong interest in possible investments in Manitoba. On behalf of Manitoba, the Manitoba Energy Authority has actively sought out potential investors in the energy-intensive field. The Province has priorized a number of projects which show good growth potential in the medium and long term. Most of these projects use mineral resources available in Manitoba and all are high in value added and include manageable transportation costs. These industrial initiatives include silica-based industries including metallurgical grade silicon products, polysilicon, and magnesium and high-tech ceramics, as well as the processing of minerals such as cesium, lithium, zirconium and tantalum. The Province is confident that when aluminum prices rise sufficiently to stimulate greenfield developments, Manitoba offers an excellent location for a smelting operation.

In addition, the Manitoba Energy Authority has generated interest in several large international firms in establishing a joint-venture to undertake a large scale commercial application of plasma technology utilizing Manitoba minerals. Plasma technology is a state-of-the-art process which is highly energy-intensive replacing the more traditional smelting process.

The Manitoba Energy Authority has primarily targeted Japanese and Korean companies for possible investment in Manitoba. Especially in Japan, the yen appreciation and resulting major rationalization of Japanese industry has resulted in Japanese companies actively searching out world-wide plant locations. A variety of major manufacturing plants have been established in North America in recent years. This is especially evidenced by auto assembly and parts plants in both Canada and the United States.

The competition for Japanese investment amongst North American government jurisdictions is fierce. Federal, provincial/state and municipal governments have provided major concessions in order to attract those investments to their areas. Concessions have included major infrastructure grants, unconditional grants, tax exemptions, loans, and loan guarantees. Manitoba does not expect to ever be able to match the financial incentive programs of other jurisdictions, either alone or together with the Federal government; however, it is critical that adequate incentives are provided to encourage the location of new energy-intensive industries in our province.

Projects

On the basis of work completed to date, there is a real possibility Manitoba can attract several new major investments in Manitoba within the next two years.

Several projects are currently under active consideration by companies from Japan, Korea, Great Britain, and the United States. In some cases, joint venture arrangements are being considered. These projects include:

| Type of Investment | Use | Potential Capital Investment | Direct Employment |
|---|---|---|---|
| Cesium plant | Cesium is used in the manufacture of optic crystals, vacuum tubes and to improve the efficiency of steam turbines. | $5.0 million | 20 |
| Zirconium | Zirconium is used as foundry sands in refractories, ceramics and abrasives. | $25.0 million | 100 |
| Lithium and gallium | Lithium used for high strength aluminum alloys. Gallium used in semi-conductors. | $50.0 million | 50-75 |
| Polysilicon | High purity single crystal silicon used in the semi-conductor industry. | $150.0 million | 200 |
| Magnesium | A light metal used in alloying with aluminum for automobile engines and parts; also used in aircraft industry. | $260.0 million | 400 |
| High-technology ceramics | Being used to replace metal in engine parts and processing machinery as well as abrasives and cutting tools. | $250.0-500.0 million | 250-500 |
| Plasma technology | State of the art smelting process to replace existing smelting processes is more efficient and energy-intensive. | | |

Other potential investments in the medium, long term include:

| | | | |
|---|---|---|---|
| Chromite (ferrochrome) | Stainless steel, chromium metal used in hardening tools refractories and chemicals. | $200.0 million | 400-500 |

| Type of Investment | Use | Potential Capital Investment | Direct Employment |
|---|---|---|---|
| Aluminum smelter | Feasibility studies show Manitoba to be an economic location for a greenfield smelter. | $5-600.0 million | 400-600 |
| Copper refinery | 100,000 tonnes blister copper per year sent to Montreal for refining. | $50-60.0 million | 100 |
| Zinc processing | Hydro-metalurgical processing of sulphide ores. | $100.0 million | 100 |

Potential energy-intensive capital investments are approximately $2.1 billion with potential direct job creation of 2,000. Indirect Economic Spinoffs could result in major economic growth for existing Manitoba firms as well as an indirect employment multiplier effect of 10,000.

Funding Requirement

In order to realize these investment opportunities, Manitoba requires the cooperation and support of the Federal government.

In order to encourage offshore companies to consider Manitoba as a location for the establishment of energy-intensive industries, it is important that adequate incentives are available.

Energy-intensive industrial development funding is required for:

A. CAPITAL GRANTS

1. Capital and equipment costs.

2. Infrastructure support and for specific investments in the areas of rail lines, land, services, harbours, electrical interconnections.

B. RESEARCH & DEVELOPMENT GRANTS

1. Product and processing research and development.

C. FEASIBILITY STUDY GRANTS

1. Market evaluations
2. Plant feasibility
3. Transportation
4. Export marketing

Those projects currently under active consideration could result in as much as $1.0 billion in new capital investments. We are confident that at least $250.0 million in energy-intensive capital investments can take place over the next 5 years. In order to ensure these investments, we recommend that $50.0 million be allocated from the Western Diversification Fund for attracting energy-intensive industries to Manitoba.